

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (cancelled).

2. (currently amended) ~~The monitor of Claim 1, further comprising:~~ A monitor for a  
2 vehicle allowing oversight and detection of vehicular activity, comprising:

4 a first camera, said first camera directed towards a roadway upon which  
the vehicle is traveling, said first camera directed towards a first line painted on  
said roadway;

6 a roadway detector, said roadway detector coupled to said first camera  
and receiving signals from said first camera, said roadway detector detecting  
8 signals from said first camera indicating presence of said first line; and

10 a recorder, said recorder coupled to said first camera and recording  
signals transmitted by said camera; whereby

12 activity of the vehicle on said roadway is detected and recorded for  
present and future review and analysis.

3. (original) The monitor of Claim 2, further comprising:

2 said recorder being capable of preserving said camera signals despite a  
collision, accident, or similar catastrophe.

4. (original) The monitor of Claim 2, further comprising:

an indicator, said indicator coupled to said roadway detector, said indicator indicating disposition of said vehicle upon said roadway relative to said first line.

5. (original) The monitor of Claim 4 wherein said indicator indicates deviation of the vehicle from a fixed distance relative to said first line.

6. (original) The monitor of Claim 5 wherein said fixed distance is set by the driver.

7. (original) The monitor of Claim 4 wherein said indicator indicates change in position from a previous position relative to said first line.

8. (original) The monitor of Claim 7 wherein said indicator indicates that the driver is weaving when constant change in position is detected.

9. (original) The monitor of Claim 5, further comprising:  
said indicator issuing a warning when the vehicle departs from a path defined by said first line.

10. (original) The monitor of Claim 9 wherein said warning is selected from a group comprising light, sound, vibration, mist, wind, heat, cold air, scent, or a combination thereof.

11. (original) The monitor of Claim 9 wherein the driver of the vehicle may set a  
2 threshold value for the amount that the vehicle departs from said path for said indicator  
to issue said warning.

12. (original) The monitor of Claim 9 wherein said warning is issued when either the  
2 vehicle departs from a position having a fixed distance from said first line, when the  
vehicle constantly changes its position from a previous position relative to said line,  
4 when a long term pattern of steering errors is detected, when long term non-movement  
of the vehicle's steering wheel is detected, when the vehicle's traveling on the rumble  
6 bars of said roadway is detected, or a combination thereof.

13. (original) The monitor of Claim 2, further comprising:

2 a second camera, said second camera directed towards said roadway and  
directed towards a second line painted on said roadway; said first line being on  
4 one side of the vehicle and said second line being on an opposite side of said  
vehicle, said vehicle travelling between said first and second lines;

6 said second camera coupled to said roadway detector, said roadway  
detector receiving signals from said second camera and detecting signals from  
8 said second camera indicating presence of said second line; whereby

coordinated detection of said first and second lines by said roadway  
10 detector indicates disposition of the vehicle between said first and second lines  
and proper travel of the vehicle along said roadway between said first and  
12 second lines.

14. (original) The monitor of Claim 13, further comprising:

an indicator, said indicator coupled to said roadway detector, said indicator indicating disposition of said vehicle upon said roadway relative to said first and second lines.

15. (original) The monitor of Claim 14 wherein said indicator indicates deviations of the vehicle from a center position between said first and second lines.

16. (original) The monitor of Claim 14, further comprising:

said indicator issuing a warning when the vehicle departs from a path defined by said first and second lines.

17. (original) The monitor of Claim 2, further comprising:

a light source, said light source illuminating said roadway before said first camera; whereby

said roadway, including said first line, are better detected by said first camera.

18. (currently amended) The monitor of Claim 17, further comprising:

said light source transmitting light of a certain character;

said first camera detecting light of said certain character; whereby

said light source may selectively illuminate said roadway for said first

camera by light of said certain character and allowing said first camera to  
specifically ~~concentrate on~~ detect said light of certain character and ignore light  
not having said certain character.

19. (original) The monitor of Claim 18 wherein said certain character of light is  
infrared.

20. (original) The monitor of Claim 2, further comprising:  
said roadway detector determining centroids of signals received from  
said first camera, said centroids indicating presence and relative location of said  
first line.

21. (original) The monitor of Claim 2, further comprising:  
said roadway detector coupled to a turn indicator, said roadway detector  
compensating for departure of said vehicle from a path associated with said first  
line.

22. (original) The monitor of Claim 2, further comprising:  
a vehicle distance detector, said vehicle distance detector coupled to said  
roadway detector, said vehicle distance detector detecting a distance between the  
vehicle and a second vehicle in front of the vehicle, said vehicle distance  
detector indicating said distance.

23. (original) The monitor of Claim 22, further comprising:

a cruise control, said cruise control coupled to a throttle of said vehicle  
and said vehicle distance detector, said cruise control keeping or holding the  
vehicle at a certain minimum distance from said second vehicle.

24. (original) The monitor of Claim 2, further comprising:

a wireless communication system, said wireless communication system  
coupled to said roadway detector, said wireless communication system  
providing wireless communications between the monitor and a wireless  
communications network.

25. (original) The monitor of Claim 24, further comprising:

a global positioning system (GPS) receiver, said GPS receiver coupled to  
said wireless communication system; whereby  
vehicle location information may be transmitted to said wireless  
communications network.

26. (original) The monitor of Claim 24, further comprising:

a logbook recorder, said logbook recorder coupled to said wireless  
communication network, said logbook recorder recording data pertinent to  
operation and maintenance of said vehicle, whereby  
remote monitoring of the vehicle and its operational status may occur  
when data recorded in said logbook is transmitted to said wireless

communications network and received by another.

27. (original) The monitor of Claim 2 wherein said first camera is mounted within a  
2 side mirror housing.

28. (original) The monitor of Claim 2 wherein the driver may zero the system to  
2 indicate a set position where the driver desires to be relative to said first line, and  
wherein said detector detects deviations from said set position.

29. (original) The monitor of Claim 2 wherein said detector detects change from a  
2 previous position relative to said first line.

30. (original) The monitor of Claim 2 wherein said detector detects non-movement of  
2 the steering wheel of said vehicle.

31. (original) The monitor of Claim 2 whereby when the driver activates the turn  
2 signal of said vehicle, said detector detects and associates said vehicle's speed and  
position with the driver's changing of a traffic lane.

32. (original) A monitor for a vehicle allowing oversight, detection, and recording of  
2 vehicular activity, comprising:

a first camera, said first camera directed towards a roadway upon which  
4 the vehicle is traveling, said first camera directed towards a first line painted on

said roadway;

6                   a second camera, said second camera directed towards said roadway and  
directed towards a second line painted on said roadway; said first line being on  
8                   one side of the vehicle and said second line being on an opposite side of said  
vehicle, said vehicle traveling between said first and second lines;

10                  first and second light sources, said first and second light sources  
respectively illuminating said roadway before said first and second cameras so  
12                  that said roadway, including said first and second lines, are better detected by,  
respectively, said first and second cameras;

14                  a roadway detector, said roadway detector coupled to said first and  
second cameras and receiving signals from said first and second cameras, said  
16                  roadway detector detecting signals from said first camera indicating presence of  
said first line, said roadway detector detecting signals from said second camera  
18                  indicating presence of said second line, so that coordinated detection of said first  
and second lines by said roadway detector indicates disposition of the vehicle  
20                  between said first and second lines and proper travel of the vehicle along said  
roadway between said first and second lines;

22                  said roadway detector determining centroids of signals received from  
said first and second cameras, said centroids respectively indicating presence  
24                  and relative location of said first and second lines;

26                  said roadway detector coupled to a turn indicator, said roadway detector  
compensating for departure of said vehicle from a path associated with said first  
and second lines when said turn indicator is activated;



28                    an indicator, said indicator coupled to said roadway detector, said  
indicator indicating disposition of said vehicle upon said roadway relative to said  
30                    first and second lines, said indicator issuing a warning when the vehicle departs  
from a path defined by said first and second lines; and

32                    a recorder, said recorder coupled to said first and second cameras and  
recording signals transmitted by said cameras, said recorder preserving said  
34                    camera signals despite a collision, accident, or similar catastrophe; whereby

                    activity of the vehicle on said roadway is detected to aid a driver of the  
36                    vehicle and recorded for future review and analysis.

33.    (original)    The monitor of Claim 32, further comprising:

2                    said first and second light sources transmitting light of a certain  
character;

4                    said first and second cameras detecting light of said certain character;  
whereby

6                    said light source may selectively illuminate said roadway for said first  
and second cameras by light of said certain character and allowing said first and  
8                    second cameras to specifically concentrate on said light of certain character and  
ignore light not having said certain character.

10  
34.    (original)    The monitor of Claim 32, further comprising:

2                    a vehicle distance detector, said vehicle distance detector coupled to said  
roadway detector, said vehicle distance detector detecting a distance between the

4                    vehicle and a second vehicle in front of the vehicle, said vehicle distance  
detector indicating said distance.

35.    (original)    The monitor of Claim 34, further comprising:

2                    a cruise control, said cruise control coupled to a throttle of said vehicle  
and said vehicle distance detector, said cruise control keeping or holding the  
4                    vehicle at a certain minimum distance from said second vehicle.

36.    (original)    The monitor of Claim 32, further comprising:

2                    a wireless communication system, said wireless communication system  
coupled to said roadway detector, said wireless communication system  
4                    providing wireless communications between the monitor and a wireless  
communications network.

37.    (original)    The monitor of Claim 36, further comprising:

2                    a global positioning system (GPS) receiver, said GPS receiver coupled to  
said wireless communication system; whereby  
4                    vehicle location information may be transmitted to said wireless  
communications network.

38.    (original)    The monitor of Claim 37, further comprising:

2                    a logbook recorder, said logbook recorder coupled to said wireless  
communication network, said logbook recorder recording data pertinent to

4 operation and maintenance of said vehicle, whereby

remote monitoring of the vehicle and its operational status may occur  
6 when data recorded in said logbook is transmitted to said wireless  
communications network and received by another.

Claims 39 – 40 (cancelled)

41. (original) A method for rating and/or monitoring a driver's performance  
2 comprising:

providing a monitor for a vehicle allowing oversight, detection, and  
4 recording of vehicular activity, said monitor comprising:

a first camera, said first camera directed towards a roadway upon which  
6 the vehicle is traveling, said first camera directed towards a first line painted on  
said roadway;

8 a roadway detector, said roadway detector coupled to said first camera  
and receiving signals from said first camera, said roadway detector detecting  
10 signals from said first camera indicating presence of said first line, and

a recorder, said recorder coupled to said first camera and recording  
12 signals transmitted by said camera, said recorder preserving said camera  
signals; and

14 detecting and recording activity of the vehicle on said roadway for  
present and future review and analysis.

42. (original) The method of Claim 41 wherein said detector detects driver deviations  
2 from a path relative to said first line.

43. (original) The method of Claim 42 further comprising rating driver performance  
2 based on a record of accumulated deviations recorded over a time period.

44. (original) The method of Claim 43 wherein said driver performance is rated by  
2 determining the root mean square value of said accumulated deviations.

45. (original) The method of Claim 43 wherein said path is defined by a line having a  
2 set distance away from said first line.

46. (original) The method of Claim 43 further comprising:  
2 said monitor further having a second camera, said second camera  
directed towards said roadway and directed towards a second line painted on  
4 said roadway;

said first line being on one side of the vehicle and said second line being  
6 on an opposite side of said vehicle, said vehicle traveling between said first and  
second lines;

8 said second camera coupled to said roadway detector, said roadway  
detector receiving signals from said second camera and detecting signals from  
10 said second camera indicating presence of said second line; whereby

coordinated detection of said first and second lines by said roadway

12                    detector indicates disposition of the vehicle between said first and second lines  
  
and proper travel of the vehicle along said roadway between said first and  
  
14                    second lines; and

                      said path being a center path between said first and second lines.

47.    (original)    The method of Claim 41 further comprising providing a station having a  
  
2                    simulated road lane for calibrating the monitor, and testing the driver.

Claims 48 – 50 (cancelled)